



October 5, 2005

Mr. Robert Lerner  
**Rite Aid Corporation**  
30 Hunter Lane  
Camp Hill, Pennsylvania 17011

RE: April 2005 Quarterly Ground Water Monitoring Results  
Rite Aid Store No. 6033  
680 South State Street  
City of Ukiah, Mendocino County, California  
**BL Project No. 98L152-B**

Dear Mr. Lerner:

Pursuant to the scope of work outlined in our Proposal No. 98L152-B, dated December 5, 2003, BL Companies has completed the sixth round of quarterly ground water sampling at the above-referenced site. The purpose of the sampling program is to continue to document the identified ground water impairment, as directed by the California Regional Water Quality Control Board (CRWQCB) in correspondence dated November 19, 2003.

### **Background**

During a Phase I Environmental Site Assessment (ESA) (January 9, 1998) and a Preliminary Site Characterization (February 6, 1998), both conducted by BL Companies, two suspected underground storage tanks (USTs) were identified near the western property boundary. The site formerly contained at least four aboveground storage tanks (ASTs) as part of the former operation of a bulk petroleum facility and a service station on the site. The results of a geophysical investigation and an American Land Title Association survey indicated that the two suspected USTs are located on property owned by the City of Ukiah. In addition, soil and ground water samples collected from 17 soil borings revealed that the site has been adversely impacted by petroleum hydrocarbons in the form of both gasoline- and diesel-related constituents. As a result of the initial investigations, an Unauthorized Release Form was submitted to the Mendocino County Health Department and the CRWQCB.

BL Companies then conducted a Site Characterization (November 1, 2002) to confirm and determine the extent of petroleum hydrocarbon impairment at the site. The Site Characterization included the installation of 12 soil borings and four on-site monitoring

Mr. Robert Lerner  
BL Project No. 981L152-B  
October 5, 2005  
Page 2 of 4

wells (MW-1, MW-2, MW-3, and MW-4). The results of the ground water investigation indicated that targeted petroleum hydrocarbon compounds were present in ground water samples collected from three of the four on-site monitoring wells. Upon completion and submission of the Site Characterization Report to the CRWQCB, they then requested additional information regarding the locations of property boundaries and the USTs from both the City of Ukiah and Atlantic Richfield Corporation, who had previously operated a bulk petroleum facility and a service station on the site. While this issue of ownership of the USTs and any related remediation measures are still being resolved, the CRWQCB requested that the ground water monitoring program on the Rite Aid property proceed independently of the suspect UST issue.

### **Field Activities**

The sixth quarterly ground water monitoring event was conducted on April 12, 2005. Ground water samples were collected from the four on-site ground water monitoring wells using the following protocol:

Prior to sample collection, the static water level in each of the monitoring wells was measured. By subtracting the depth to ground water in each well from the surveyed elevations, a detailed map of the shallow ground water potentiometric surface was prepared (see Attachment 1, Ground Water Potentiometric Surface Map and Attachment 3, Table 1). Based on the potentiometric surface data, the ground water flow direction beneath the site is generally to the southeast with a strong easterly component of flow in the vicinity of MW-2, which is slightly different from previous determinations. The ground water flow direction in the past has generally been to the southeast.

A minimum of three well volumes of water was purged from the wells using new polyethylene hose and a pre-cleaned submersible pump. During well purging, the temperature, pH, dissolved oxygen, specific conductivity, and oxidation-reduction potential of the ground water were monitored to ensure that representative samples were collected. The purged ground water was collected in 55-gallon drums for later off-site disposal. After purging each well, ground water samples were collected with single-use polyethylene bailers and placed into pre-cleaned glass and plastic sample containers fitted with Teflon-lined lids, preserved with the appropriate reagent, and stored at 4 degrees Centigrade (or less) until delivery to Alpha Analytical Laboratories Inc. of Ukiah, California.

Mr. Robert Lerner  
BL Project No. 981L152-B  
October 5, 2005  
Page 3 of 4

### **Chemical Analyses**

Please find enclosed as Attachment 2 the analytical results for the ground water samples collected on April 12, 2005 from the on-site monitoring wells. The samples were analyzed for total petroleum hydrocarbons (TPH) as gasoline; TPH as diesel; and benzene, toluene, ethylbenzene, and xylenes. Following BL Companies' request on July 6, 2004 to eliminate the analysis of semi-volatile organic compounds, Ms. Colleen Stone of the CRWQCB officially concurred with this request in a letter dated July 9, 2004. In addition, the CRWQCB recommended that analysis of the five fuel oxygenates, including methyl tertiary-butyl ether, also be removed from the quarterly monitoring activities, as none of these compounds have been detected in any of the samples collected since the initiation of ground water monitoring activities.

### **Findings**

The results of the laboratory analyses (see Attachment 4, Tables 2 and 3) were compared to the previous analytical results obtained during the previous site characterization and quarterly sampling events. Table 2 only includes those compounds formerly and/or currently detected in at least one sample. The results of the chemical analysis reported no target compounds above laboratory detection limits in MW-1, which is the most hydraulically upgradient monitoring well on the site. No TPH-gasoline or individual gasoline-related VOCs were identified above laboratory detection limits in MW-4 during the sixth round of quarterly sampling. However, TPH-diesel was detected in the ground water sample collected from MW-4 at a concentration of 100 µg/l.

The ground water samples collected from the remaining two monitoring wells (MW-2 and MW-3) each contained four detectable target compounds (benzene, toluene, ethylbenzene and xylenes), along with reported concentrations of TPH-gasoline and TPH-diesel, during the sixth round of quarterly sampling. Monitoring well MW-2 was reported with elevated concentrations of benzene at 49 µg/l, toluene at 27 µg/l, ethylbenzene at 270 µg/l, and xylenes at 200 µg/l. In addition, MW-2 also reported concentrations of TPH-gasoline (7,900 µg/l) and TPH-diesel (640 µg/l). Monitoring well MW-3 was reported with elevated concentrations of four target compounds, including benzene at 26 µg/l, toluene at 0.62 µg/l, ethylbenzene at 31 µg/l, and xylenes at 17 µg/l. In addition, MW-3 also reported concentrations of TPH-gasoline (1,000 µg/l) and TPH-diesel (260 µg/l).

### **Conclusions**

In summary, the results of the current sampling round continue to indicate that the site remains impacted by petroleum compounds. In general, the target compound

Mr. Robert Lerner  
BL Project No. 981L152-B  
October 5, 2005  
Page 4 of 4

concentrations detected during the current sampling event are relatively consistent with the results from the prior sampling events.

BL Companies recommends that a copy of this report be submitted to the CRWQCB case manager, Ms. Kasey Ashley.

BL Companies appreciates the opportunity to continue to provide environmental services to you. Should you have any questions regarding the above, please contact the undersigned at your convenience.

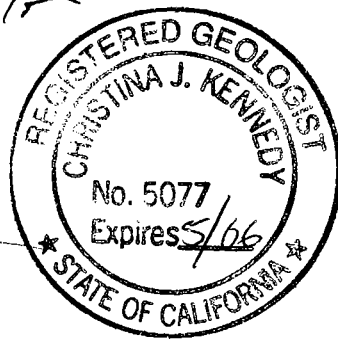
Respectfully submitted,

**BL Companies**

*Kenneth M. Yoder*  
Kenneth M. Yoder, PG  
Senior Project Manager

Reviewed by:

*Christina J. Kennedy*  
Christina Kenneay  
CKG Environmental, Inc.  
CA Geologist No. 5077



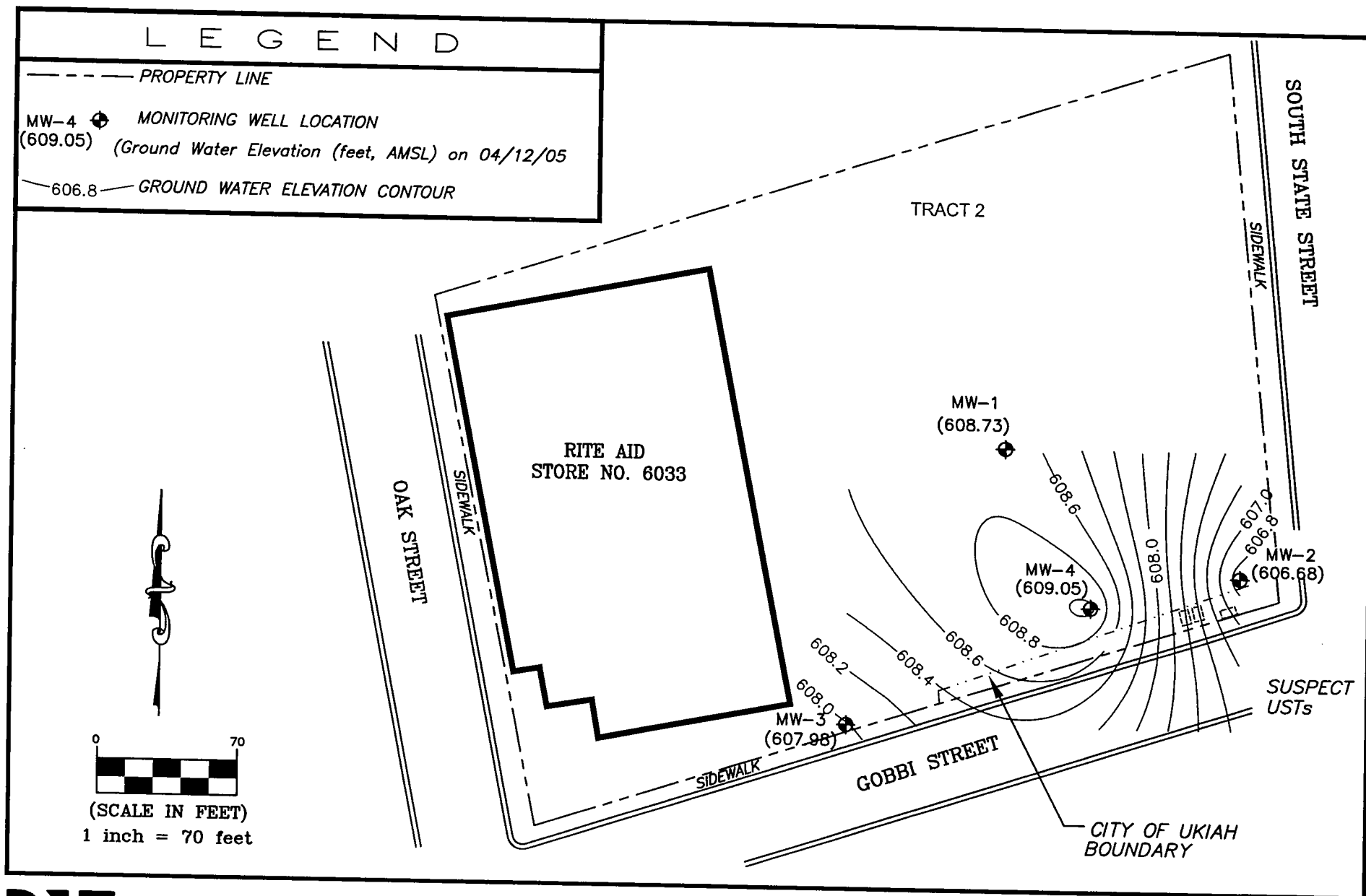
Attachments

## **ATTACHMENTS**

Attachment 1	Ground Water Potentiometric Surface Map
Attachment 2	Alpha Analytical Laboratories Report
Attachment 3	Table 1 – Summary of Monitoring Well Construction and Elevation Data
Attachment 4	Tables 2 and 3 – Results of Chemical Analyses Performed on Ground Water Samples

## **ATTACHMENT 1**

### **Ground Water Potentiometric Surface Map**



# GROUND WATER POTENTIOMETRIC SURFACE MAP - 04/12/2005

RITE AID STORE NO. 6033  
680 SOUTH STATE STREET  
CITY OF UKIAH, MENDOCINO COUNTY, CALIFORNIA

Drawn	S.R.L.
Approved	K.M.Y.
Scale	1" = 70'
Project No.	98L152-B
Date	09/16/05
CAD File	98L152-B.GW Elev.04-12-2005

## **ATTACHMENT 2**

### **Alpha Analytical Laboratories Report**





Alpha Analytical Laboratories Inc.

208 Mason St. Ukiah, California 95482

e-mail: [clientservices@alpha-labs.com](mailto:clientservices@alpha-labs.com) • Phone: (707) 468-0401 • Fax: (707) 468-5267

26 April 2005

BL Companies

Attn: Ken Yoder

830 Sir Thomas Court

Harrisburg, PA 17109

RE: Rite Aid

Work Order: A504317

Enclosed are the results of analyses for samples received by the laboratory on 04/12/05 13:10. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Nena M. Burgess For Sheri L. Speaks  
Project Manager



Alpha Analytical Laboratories Inc.

208 Mason St. Ukiah, California 95482

e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

## CHEMICAL EXAMINATION REPORT

Page 1 of 8

BL Companies  
830 Sir Thomas Court  
Harrisburg, PA 17109  
Attn: Ken Yoder

Report Date: 04/26/05 12:55

Project No: -

Project ID: Rite Aid

Order Number  
A504317

Receipt Date/Time  
04/12/2005 13:10

Client Code  
BLCOMP

Client PO/Reference

### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-1	A504317-01	Water	04/12/05 11:40	04/12/05 13:10
MW-2	A504317-02	Water	04/12/05 11:10	04/12/05 13:10
MW-3	A504317-03	Water	04/12/05 12:20	04/12/05 13:10
MW-4	A504317-04	Water	04/12/05 10:30	04/12/05 13:10

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Nena M. Burgess For Sheri L. Speaks  
Project Manager

4/26/2005



Alpha Analytical Laboratories Inc.

e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

208 Mason St. Ukiah, California 95482

## CHEMICAL EXAMINATION REPORT

Page 2 of 8

BL Companies  
830 Sir Thomas Court  
Harrisburg, PA 17109  
Attn: Ken Yoder

Report Date: 04/26/05 12:55

Project No: -

Project ID: Rite Aid

Order Number  
A504317

Receipt Date/Time  
04/12/2005 13:10

Client Code  
BLCOMP

Client PO/Reference

## Alpha Analytical Laboratories, Inc.

	METHOD	BATCH	PREPARED	ANALYZED	DILUTION	RESULT	PQL	NOTE
MW-1 (A504317-01)								
			Sample Type: Water			Sampled: 04/12/05 11:40		
TPH by EPA/LUFT GC/GCMS Methods								
TPH as Diesel	8015DRO	AD52110	04/21/05	04/22/05	1	ND ug/l	50	
TPH as Gasoline	8260GRO	AD52109	04/19/05	04/20/05	"	ND "	50	
Surrogate: 1,4-Bromofluorobenzene	8015DRO	AD52110	04/21/05	04/22/05		80.8 %	20-152	
Surrogate: Toluene-d8	8260GRO	AD52109	04/19/05	04/20/05		128 %	70-129	
Volatile Organic Compounds by EPA Method 8260B								
Benzene	EPA 8260B	AD52112	"	04/20/05	1	ND ug/l	0.30	
Toluene	"	"	"	"	"	ND "	0.30	
Ethylbenzene	"	"	"	"	"	ND "	0.50	
Xylenes (total)	"	"	"	"	"	ND "	0.50	
Surrogate: Bromofluorobenzene	"	"	"	"		114 %	45-147	
Surrogate: Dibromofluoromethane	"	"	"	"		118 %	85-129	
Surrogate: Toluene-d8	"	"	"	"		128 %	74-137	
MW-2 (A504317-02)								
			Sample Type: Water			Sampled: 04/12/05 11:10		
TPH by EPA/LUFT GC/GCMS Methods								
TPH as Diesel	8015DRO	AD52110	04/21/05	04/22/05	1.04	640 ug/l	52	D-08
TPH as Gasoline	8260GRO	AD52109	04/19/05	04/20/05	20	7900 "	1000	
Surrogate: 1,4-Bromofluorobenzene	8015DRO	AD52110	04/21/05	04/22/05		86.7 %	20-152	
Surrogate: Toluene-d8	8260GRO	AD52109	04/19/05	04/20/05		125 %	70-129	
Volatile Organic Compounds by EPA Method 8260B								
Benzene	EPA 8260B	AD52112	"	04/20/05	20	49 ug/l	6.0	
Toluene	"	"	"	"	"	27 "	6.0	
Ethylbenzene	"	"	"	"	"	270 "	10	
Xylenes (total)	"	"	"	"	"	200 "	10	
Surrogate: Bromofluorobenzene	"	"	"	"		110 %	45-147	
Surrogate: Dibromofluoromethane	"	"	"	"		96.0 %	85-129	
Surrogate: Toluene-d8	"	"	"	"		125 %	74-137	
MW-3 (A504317-03)								
			Sample Type: Water			Sampled: 04/12/05 12:20		

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Nena M. Burgess For Sheri L. Speaks  
Project Manager

4/26/2005



Alpha Analytical Laboratories Inc.

208 Mason St. Ukiah, California 95482

e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

## CHEMICAL EXAMINATION REPORT

Page 3 of 8

BL Companies  
830 Sir Thomas Court  
Harrisburg, PA 17109  
Attn: Ken Yoder

Report Date: 04/26/05 12:55

Project No: -

Project ID: Rite Aid

Order Number  
A504317

Receipt Date/Time  
04/12/2005 13:10

Client Code  
BLCOMP

Client PO/Reference

### Alpha Analytical Laboratories, Inc.

METHOD	BATCH	PREPARED	ANALYZED	DILUTION	RESULT	PQL	NOTE
<b>MW-3 (A504317-03)</b>							
TPH by EPA/LUFT GC/GCMS Methods				Sample Type: Water	Sampled: 04/12/05 12:20		
TPH as Diesel	8015DRO	AD52110	04/21/05	04/22/05	1	260 ug/l	50 D-08
TPH as Gasoline	8260GRO	AD52501	04/21/05	04/22/05	10	1000 "	500
Surrogate: 1,4-Bromofluorobenzene	8015DRO	AD52110	04/21/05	04/22/05		97.4 %	20-152
Surrogate: Toluene-d8	8260GRO	AD52501	04/21/05	04/22/05		119 %	70-129

#### Volatile Organic Compounds by EPA Method 8260B

Benzene	EPA 8260B	AD52112	04/19/05	04/20/05	2	26 ug/l	0.60
Toluene	"	"	"	"	"	0.62 "	0.60
Ethylbenzene	"	"	"	"	"	31 "	1.0
Xylenes (total)	"	"	"	"	"	17 "	1.0
Surrogate: Bromofluorobenzene	"	"	"	"		107 %	45-147
Surrogate: Dibromofluoromethane	"	"	"	"		87.6 %	85-129
Surrogate: Toluene-d8	"	"	"	"		113 %	74-137

#### MW-4 (A504317-04)

##### TPH by EPA/LUFT GC/GCMS Methods

Sample Type: Water

Sampled: 04/12/05 10:30

TPH as Diesel	8015DRO	AD52110	04/21/05	04/22/05	1	100 ug/l	50
TPH as Gasoline	8260GRO	AD52109	04/19/05	04/20/05	5	ND "	250 R-04
Surrogate: 1,4-Bromofluorobenzene	8015DRO	AD52110	04/21/05	04/22/05		75.6 %	20-152
Surrogate: Toluene-d8	8260GRO	AD52109	04/19/05	04/20/05		120 %	70-129

#### Volatile Organic Compounds by EPA Method 8260B

Benzene	EPA 8260B	AD52112	"	04/20/05	5	ND ug/l	1.5 R-04
Toluene	"	"	"	"	"	ND "	1.5 R-04
Ethylbenzene	"	"	"	"	"	ND "	2.5 R-04
Xylenes (total)	"	"	"	"	"	ND "	2.5 R-04
Surrogate: Bromofluorobenzene	"	"	"	"		105 %	45-147
Surrogate: Dibromofluoromethane	"	"	"	"		99.2 %	85-129
Surrogate: Toluene-d8	"	"	"	"		120 %	74-137

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Nena M. Burgess For Sheri L. Speaks  
Project Manager

4/26/2005



Alpha Analytical Laboratories Inc.

e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

208 Mason St. Ukiah, California 95482

## CHEMICAL EXAMINATION REPORT

Page 4 of 8

BL Companies  
830 Sir Thomas Court  
Harrisburg, PA 17109  
Attn: Ken Yoder

Report Date: 04/26/05 12:55  
Project No: -  
Project ID: Rite Aid

Order Number  
A504317

Receipt Date/Time  
04/12/2005 13:10

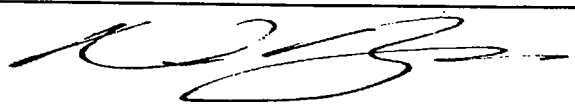
Client Code  
BLCOMP

Client PO/Reference

### TPH by EPA/LUFT GC/GCMS Methods - Quality Control

Analyte(s)	Result	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
<b>Batch AD52109 - EPA 5030 Water GCMS</b>										
<b>Blank (AD52109-BLK1)</b>				Prepared & Analyzed: 04/19/05						
TPH as Gasoline	ND	50	ug/l							
Surrogate: Toluene-d8	31.9		"	25.0		128	70-129			
<b>LCS (AD52109-BS1)</b>				Prepared & Analyzed: 04/19/05						
TPH as Gasoline	211	50	ug/l	200		106	65-137			
Surrogate: Toluene-d8	31.0		"	25.0		124	70-129			
<b>LCS Dup (AD52109-BSD1)</b>				Prepared & Analyzed: 04/19/05						
TPH as Gasoline	210	50	ug/l	200		105	65-137	0.475	20	
Surrogate: Toluene-d8	30.1		"	25.0		120	70-129			
<b>Matrix Spike (AD52109-MS1)</b>				<b>Source: A504310-02</b>		Prepared & Analyzed: 04/19/05				
TPH as Gasoline	78.8	50	ug/l	200	ND	35.9	65-137			QM-05
Surrogate: Toluene-d8	29.8		"	25.0		119	70-129			
<b>Batch AD52110 - EPA 3510B Water</b>										
<b>Blank (AD52110-BLK1)</b>				Prepared & Analyzed: 04/21/05						
TPH as Diesel	ND	50	ug/l							
Surrogate: 1,4-Bromofluorobenzene	417		"	579		72.0	20-152			
<b>LCS (AD52110-BS1)</b>				Prepared & Analyzed: 04/21/05						
TPH as Diesel	1650	50	ug/l	1960		84.2	52-136			
Surrogate: 1,4-Bromofluorobenzene	493		"	579		85.1	20-152			
<b>LCS Dup (AD52110-BSD1)</b>				Prepared & Analyzed: 04/21/05						
TPH as Diesel	1610	50	ug/l	1960		82.1	52-136	2.45	25	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

  
Nena M. Burgess For Sheri L. Speaks  
Project Manager

4/26/2005



Alpha Analytical Laboratories Inc.

e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

208 Mason St. Ukiah, California 95482

## CHEMICAL EXAMINATION REPORT

Page 5 of 8

BL Companies  
830 Sir Thomas Court  
Harrisburg, PA 17109  
Attn: Ken Yoder

Report Date: 04/26/05 12:55  
Project No: -  
Project ID: Rite Aid

Order Number  
A504317

Receipt Date/Time  
04/12/2005 13:10

Client Code  
BLCOMP

Client PO/Reference

### TPH by EPA/LUFT GC/GCMS Methods - Quality Control

Analyte(s)	Result	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
<b>Batch AD52110 - EPA 3510B Water</b>										
<b>LCS Dup (AD52110-BSD1)</b>				Prepared & Analyzed: 04/21/05						
Surrogate: 1,4-Bromofluorobenzene	509		"	579		87.9	20-152			
<b>Batch AD52501 - EPA 5030 Water GCMS</b>										
<b>Blank (AD52501-BLK1)</b>				Prepared & Analyzed: 04/21/05						
TPH as Gasoline	ND	50	ug/l							
Surrogate: Toluene-d8	31.7		"	25.0		127	70-129			
<b>LCS (AD52501-BS1)</b>				Prepared & Analyzed: 04/21/05						
TPH as Gasoline	225	50	ug/l	200		112	65-137			
Surrogate: Toluene-d8	30.1		"	25.0		120	70-129			
<b>LCS Dup (AD52501-BSD1)</b>				Prepared & Analyzed: 04/21/05						
TPH as Gasoline	233	50	ug/l	200		116	65-137	3.49	20	
Surrogate: Toluene-d8	29.4		"	25.0		118	70-129			
<b>Matrix Spike (AD52501-MS1)</b>				Source: A504413-02 Prepared & Analyzed: 04/21/05						
TPH as Gasoline	291	50	ug/l	200	ND	138	65-137			QM-05
Surrogate: Toluene-d8	30.1		"	25.0		120	70-129			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Nena M. Burgess For Sheri L. Speaks  
Project Manager

4/26/2005



Alpha Analytical Laboratories Inc.

e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

208 Mason St. Ukiah, California 95482

## CHEMICAL EXAMINATION REPORT

Page 6 of 8

BL Companies  
830 Sir Thomas Court  
Harrisburg, PA 17109  
Attn: Ken Yoder

Report Date: 04/26/05 12:55  
Project No: -  
Project ID: Rite Aid

Order Number  
A504317

Receipt Date/Time  
04/12/2005 13:10

Client Code  
BLCOMP

Client PO/Reference

### Volatile Organic Compounds by EPA Method 8260B - Quality Control

Analyte(s)	Result	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
<b>Batch AD52112 - EPA 5030 Water GCMS</b>										
<b>Blank (AD52112-BLK1)</b>				Prepared & Analyzed: 04/19/05						
Benzene	ND	0.30	ug/l							
Toluene	ND	0.30	"							
Ethylbenzene	ND	0.50	"							
Xylenes (total)	ND	0.50	"							
Surrogate: Bromofluorobenzene	26.4		"	25.0		106	45-147			
Surrogate: Dibromofluoromethane	29.1		"	25.0		116	85-129			
Surrogate: Toluene-d8	31.9		"	25.0		128	74-137			
<b>LCS (AD52112-BS1)</b>				Prepared & Analyzed: 04/19/05						
Benzene	10.6	0.30	ug/l	10.0		106	79-116			
Toluene	12.2	0.30	"	10.0		122	83-120			QL-03
Ethylbenzene	12.3	0.50	"	10.0		123	81-119			QL-03
Xylenes (total)	37.2	0.50	"	30.0		124	79-121			QL-03
Surrogate: Bromofluorobenzene	28.8		"	25.0		115	45-147			
Surrogate: Dibromofluoromethane	24.7		"	25.0		98.8	85-129			
Surrogate: Toluene-d8	30.0		"	25.0		120	74-137			
<b>LCS Dup (AD52112-BSD1)</b>				Prepared & Analyzed: 04/19/05						
Benzene	10.6	0.30	ug/l	10.0		106	79-116	0.00	25	
Toluene	11.8	0.30	"	10.0		118	83-120	3.33	25	
Ethylbenzene	11.8	0.50	"	10.0		118	81-119	4.15	25	
Xylenes (total)	36.5	0.50	"	30.0		122	79-121	1.90	25	QL-03
Surrogate: Bromofluorobenzene	28.1		"	25.0		112	45-147			
Surrogate: Dibromofluoromethane	24.9		"	25.0		99.6	85-129			
Surrogate: Toluene-d8	29.5		"	25.0		118	74-137			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Nena M. Burgess For Sheri L. Speaks  
Project Manager

4/26/2005



Alpha Analytical Laboratories Inc.

e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

208 Mason St. Ukiah, California 95482

## CHEMICAL EXAMINATION REPORT

Page 7 of 8

BL Companies  
830 Sir Thomas Court  
Harrisburg, PA 17109  
Attn: Ken Yoder

Report Date: 04/26/05 12:55  
Project No: -  
Project ID: Rite Aid

Order Number  
A504317

Receipt Date/Time  
04/12/2005 13:10

Client Code  
BLCOMP

Client PO/Reference

### Volatile Organic Compounds by EPA Method 8260B - Quality Control

Analyte(s)	Result	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
<b>Batch AD52112 - EPA 5030 Water GCMS</b>										
<b>Matrix Spike (AD52112-MS1)</b>		<b>Source: A504310-01</b>			<b>Prepared &amp; Analyzed: 04/19/05</b>					
Benzene	7.24	0.30	ug/l	10.0	ND	72.4	63-144			
Toluene	7.86	0.30	"	10.0	ND	78.6	65-145			
Ethylbenzene	7.49	0.50	"	10.0	ND	74.9	57-155			
Xylenes (total)	24.8	0.50	"	30.0	1.4	78.0	59-149			
Surrogate: Bromofluorobenzene	26.6		"	25.0		106	45-147			
Surrogate: Dibromofluoromethane	23.7		"	25.0		94.8	85-129			
Surrogate: Toluene-d8	28.4		"	25.0		114	74-137			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Nena M. Burgess For Sheri L. Speaks  
Project Manager

4/26/2005





Alpha Analytical Laboratories Inc.

208 Mason St. Ukiah, California 95482

e-mail: [clientservices@alpha-labs.com](mailto:clientservices@alpha-labs.com) • Phone: (707) 468-0401 • Fax: (707) 468-5267

## CHEMICAL EXAMINATION REPORT

Page 8 of 8

BL Companies  
830 Sir Thomas Court  
Harrisburg, PA 17109  
Attn: Ken Yoder

Report Date: 04/26/05 12:55  
Project No: -  
Project ID: Rite Aid

Order Number	Receipt Date/Time	Client Code	Client PO/Reference
A504317	04/12/2005 13:10	BLCOMP	

### Notes and Definitions

- R-04 The Reporting Limits for this analysis are elevated due to sample foaming.
- QM-05 The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable.
- QL-03 Although the LCS/LCSD recovery for this analyte is outside of in-house developed control limits, it is within the EPA recommended range of 70-130%.
- D-08 Results in the diesel organics range are primarily due to overlap from a gasoline range product.
- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- dry Sample results reported on a dry weight basis
- RPD Relative Percent Difference
- PQL Practical Quantitation Limit

## MONITORING WELL FIELD SHEET

Date: <u>4/12/05</u>	Well ID: <u>MW-3</u>
Client: <u>RITE AID</u>	Depth of Well: <u>40.00'</u>
Site: _____	Depth to Water: <u>5.6</u>
_____	Water Column Height: <u>34.4</u>
Phone: _____	One Well Vol: <u>22.56</u> <span style="float: right;">67.69</span>
_____	Product Depth: _____
_____	

### DETERMINING VOLUME OF WELL:

$$V = H \times D(\text{Squared}) \times 0.041$$

V = one well volume (gallons)

H = height of water column (feet)

D = inside diameter of well (inches)

NOTE: Collect EC, T, and pH initially and after every well volume.

<u>TIME</u>	<u>T</u>	<u>EC</u>	<u>pH</u>	<u>Comments*</u> (Color, Odor, Exceptions)
1200	22.49	113	6.14	CLEAR
1210	20.60	118	6.20	
1220	19.49	189	6.26	

Sample time: 1220

Total presampling time: \_\_\_\_\_

\* Sample when EC and T have stabilized, and at least 3-5 well volumes have been purged. If well is purged to dryness before 3-5 volumes are purged and well is very slow to recover, sample will be drawn as soon as well has recovered sufficiently.

Name: Bob & Don

## MONITORING WELL FIELD SHEET

Date: 4-12-05  
 Client: RITE AID  
 Site: \_\_\_\_\_  
 Phone: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Well ID: MW-4  
 Depth of Well: 30.00'  
 Depth to Water: 2.20'  
 Water Column Height: 27.80  
 One Well Vol: 18.23 54.71  
 Product Depth: \_\_\_\_\_

### DETERMINING VOLUME OF WELL:

$$V = H \times D(\text{Squared}) \times 0.041$$

V = one well volume (gallons)

H = height of water column (feet)

D = inside diameter of well (inches)

NOTE: Collect EC, T, and pH initially and after every well volume.

<u>TIME</u>	<u>T</u>	<u>EC</u>	<u>pH</u>	<u>Comments*</u> (Color, Odor, Exceptions)
	<u>16.87</u>			
<u>1020</u>	<u>16.87</u>	<u>588</u>	<u>7.04</u>	<u>CLEAR</u>
<u>1025</u>	<u>17.03</u>	<u>586</u>	<u>6.74</u>	
<u>1030</u>	<u>16.87</u>	<u>589</u>	<u>6.60</u>	

Sample time: 1030

Total presampling time: \_\_\_\_\_

\* Sample when EC and T have stabilized, and at least 3-5 well volumes have been purged. If well is purged to dryness before 3-5 volumes are purged and well is very slow to recover, sample will be drawn as soon as well has recovered sufficiently.

Name: Bob & Don

## MONITORING WELL FIELD SHEET

Date: <u>4-12-05</u>	Well ID: <u>MW-1</u>
Client: <u>RITE AID</u>	Depth of Well: <u>610.00'</u>
Site: _____	Depth to Water: <u>3.26</u>
Phone: _____	Water Column Height: <u>36.74</u>
_____	One Well Vol: <u>24.10</u> <b>72.30</b>
_____	Product Depth: _____

### DETERMINING VOLUME OF WELL:

$$V = H \times D(\text{Squared}) \times 0.041$$

V = one well volume (gallons)

H = height of water column (feet)

D = inside diameter of well (inches)

NOTE: Collect EC, T, and pH initially and after every well volume.

<u>TIME</u>	<u>T</u>	<u>EC</u>	<u>pH</u>	<u>Comments*</u> (Color, Odor, Exceptions)
1120	19.53	196	6.49	CLEAR
1130	19.20	207	6.42	
1140	19.20	223	6.30	

Sample time: 1140

Total presampling time: \_\_\_\_\_

\* Sample when EC and T have stabilized, and at least 3-5 well volumes have been purged. If well is purged to dryness before 3-5 volumes are purged and well is very slow to recover, sample will be drawn as soon as well has recovered sufficiently.

Name: Bob & Don

## MONITORING WELL FIELD SHEET

Date: <u>4-12-05</u>	Well ID: <u>MW-2</u>
Client: <u>RITE AID</u>	Depth of Well: <u>35.00'</u>
Site: _____	Depth to Water: <u>3.41</u>
Phone: _____	Water Column Height: <u>31.59</u>
_____	One Well Vol: <u>20.72</u> <u>62.16</u>
_____	Product Depth: _____

### DETERMINING VOLUME OF WELL:

$$V = H \times D(\text{Squared}) \times 0.041$$

V = one well volume (gallons)

H = height of water column (feet)

D = inside diameter of well (inches)

NOTE: Collect EC, T, and pH initially and after every well volume.

<u>TIME</u>	<u>T</u>	<u>EC</u>	<u>pH</u>	<u>Comments*</u> (Color, Odor, Exceptions)
1055	19.14	483	6.79	CLEAR
1100	19.09	482	6.64	
1110	18.75	476	6.63	

Sample time: 1110

Total presampling time: \_\_\_\_\_

\* Sample when EC and T have stabilized, and at least 3-5 well volumes have been purged. If well is purged to dryness before 3-5 volumes are purged and well is very slow to recover, sample will be drawn as soon as well has recovered sufficiently.

Name: Bob & Don



e-mail: [clientservices@alpha-labs.com](mailto:clientservices@alpha-labs.com)

Phone: (707) 468-0401 • Fax: (707) 468-5267

Lab No. A504317

Page 1 of 1

[illegible]

## **ATTACHMENT 3**

### **Table 1 Summary of Monitoring Well Construction and Elevation Data**

**TABLE 1**  
**SUMMARY OF MONITORING WELL CONSTRUCTION AND GROUND WATER ELEVATIONS**  
**RITE AID STORE NO. 6033**  
**CITY OF UKIAH, MENDOCINO COUNTY, CALIFORNIA**

Well No.	Total Depth (feet, bgs)	Relative TOC Elevation (feet)	Static Water Level (feet below TOC)								Relative Ground Water Elevation (feet)							
			19-Sep-02	7-Oct-02	28-Jan-04	14-Apr-04	23-Jul-04	29-Oct-04	24-Jan-05	12-Apr-05	19-Sep-02	7-Oct-02	28-Jan-04	14-Apr-04	23-Jul-04	29-Oct-04	24-Jan-05	12-Apr-05
MW-1	40	611.99	4.01	8.10	3.19	3.21	3.61	4.12	3.68	3.26	607.98	603.89	608.80	608.78	608.38	607.87	608.31	608.73
MW-2	35	610.09	4.59	9.07	3.00	3.56	3.87	4.54	3.70	3.41	605.50	601.02	607.09	606.53	606.22	605.55	606.39	606.68
MW-3	40	613.58	7.55	14.37	5.29	5.63	6.58	6.78	6.36	5.60	606.03	599.21	608.29	607.95	607.00	606.80	607.22	607.98
MW-4	30	611.25	5.17	10.21	2.91	3.43	4.70	4.38	2.87	2.20	606.08	601.04	608.34	607.82	606.55	606.87	608.38	609.05

Notes:  
 TOC = Top of Casing  
 bgs = Below Ground Surface



## **ATTACHMENT 4**

### **Tables 2 and 3 Results of Chemical Analyses Performed on Ground Water Samples**

**TABLE 2**  
**SUMMARY OF GROUND WATER SVOC ANALYSES**  
**RITE AID STORE NO. 6033**  
**CITY OF UKIAH, MENDOCINO COUNTY, CALIFORNIA**

Sample ID	Sample Date	Acenaphthylene	Acenaphthene	Anthracene	Fluoranthene	Fluorene	Phenanthrene	1-Methylnaphthalene	2-Methylnaphthalene	Naphthalene	Pyrene	Chrysene	Benzo(a)anthracene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Benzo(a)pyrene	Indeno(1,2,3-c,d)pyrene	Dibenzo(a,h)anthracene	Benzo(g,h,i)perylene
MW-1	19-Sep-02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	7-Oct-02	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	28-Jan-04	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	14-Apr-04	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	27-Jul-04	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	29-Oct-04	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	24-Jan-05	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-2	12-Apr-05	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	19-Sep-02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	7-Oct-02	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	28-Jan-04	ND	ND	ND	ND	ND	ND	0.75	1.4	3.7	ND	ND	ND	ND	ND	ND	ND	ND	ND
	14-Apr-04	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND
	27-Jul-04	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	29-Oct-04	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3	24-Jan-05	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	12-Apr-05	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	19-Sep-02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	7-Oct-02	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	28-Jan-04	ND	ND	ND	ND	ND	ND	4	4.2	13	ND	ND	ND	ND	ND	ND	ND	ND	ND
	14-Apr-04	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	23-Jul-04	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4	29-Oct-04	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	24-Jan-05	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	12-Apr-05	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	19-Sep-02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	7-Oct-02	ND	ND	ND	6	ND	ND	ND	ND	ND	20	4.5	4.9	2.5	2.8	3.6	ND	ND	ND
	24-Jan-04	ND	9	4.4	4.1	8.1	ND	0.86	ND	0.77	3.2	ND	ND	ND	ND	ND	ND	ND	ND
	14-Apr-04	ND	10	ND	ND	10	ND	NA	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND
MW-4	23-Jul-04	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	29-Oct-04	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	24-Jan-05	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	12-Apr-05	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	12-Apr-05	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Results reported in micrograms per liter (ug/l)

ND = Not Detected

NA = Not Analyzed

**TABLE 3**  
**SUMMARY OF GROUND WATER VOC ANALYSES**  
 RTE AID STORE NO. 6033  
 CITY OF UKIAH, MENDOCINO COUNTY, CALIFORNIA

Sample ID	Sample Date	Benzene	Toluene	Ethylbenzene	Xylenes	Tert-butyl alcohol	Di-isopropyl ether	Ethyl tert-butyl ether	Tert-amyl methyl ether	Methyl tert-butyl ether (MTBE)	TPH - Gasoline	TPH - Diesel
MW-1	19-Sep-02	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
	7-Oct-02	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	28-Jan-04	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	14-Apr-04	ND	0.86	ND	ND	ND	ND	ND	ND	ND	ND	ND
	27-Jul-04	ND	ND	ND	ND	NA	NA	NA	NA	NA	ND	ND
MW-2	29-Oct-04	ND	ND	ND	ND	NA	NA	NA	NA	NA	ND	ND
	24-Jan-05	ND	ND	ND	ND	NA	NA	NA	NA	NA	ND	ND
	12-Apr-05	ND	ND	ND	ND	NA	NA	NA	NA	NA	ND	ND
	19-Sep-02	690	51	180	100	ND	ND	ND	ND	ND	3,700	NA
	7-Oct-02	160	14	47	38	ND	ND	ND	ND	ND	670	ND
MW-3	28-Jan-04	69	ND	38	12	ND	ND	ND	ND	ND	1,000	110
	14-Apr-04	180	30	69	45	ND	ND	ND	ND	ND	1,200	77
	27-Jul-04	76	17	130	95	NA	NA	NA	NA	NA	3,900	660
	29-Oct-04	72	29	180	130	NA	NA	NA	NA	NA	4,800	180
	24-Jan-05	79	35	240	170	NA	NA	NA	NA	NA	6,300	800
MW-4	12-Apr-05	49	27	270	200	NA	NA	NA	NA	NA	7,900	640
	19-Sep-02	23	ND	44	64	ND	ND	ND	ND	ND	2,300	NA
	7-Oct-02	6.5	ND	6.4	13	ND	ND	ND	ND	ND	800	610
	28-Jan-04	81	0.76	63	21	ND	ND	ND	ND	ND	1,700	230
	14-Apr-04	28	ND	38	21	ND	ND	ND	ND	ND	920	150
MW-5	23-Jul-04	14	ND	32	30	NA	NA	NA	NA	NA	1,800	1,600
	29-Oct-04	4.3	ND	18	21	NA	NA	NA	NA	NA	1,800	110
	24-Jan-05	5	ND	30	32	NA	NA	NA	NA	NA	2,100	350
	12-Apr-05	26	0.62	31	17	NA	NA	NA	NA	NA	1,000	260
	19-Sep-02	1.1	ND	ND	1.0	ND	ND	ND	ND	ND	750	NA
MW-6	7-Oct-02	ND	ND	ND	ND	ND	ND	ND	ND	ND	1,500	3,400
	28-Jan-04	0.53	ND	ND	ND	ND	ND	ND	ND	ND	320	310
	14-Apr-04	ND	ND	ND	ND	ND	ND	ND	ND	ND	350	520
	23-Jul-04	ND	ND	ND	ND	NA	NA	NA	NA	NA	ND	250
	29-Oct-04	ND	ND	ND	ND	NA	NA	NA	NA	NA	ND	ND
MW-7	24-Jan-05	ND	ND	ND	ND	NA	NA	NA	NA	NA	180	140
	12-Apr-05	ND	ND	ND	ND	NA	NA	NA	NA	NA	ND	100

Results reported in micrograms per liter (ug/l)  
 ND = Not Detected  
 NA = Not Analyzed